



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,120	10/09/2003	Yoshihiko Mitamura	046601-5114	8074

9629 7590 05/03/2005

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

ROYER, WILLIAM J

ART UNIT PAPER NUMBER

2852

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Ak

Office Action Summary

Application No.

10/681,120

Applicant(s)

MITAMURA ET AL.

Examiner

William J. Royer

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 11, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9, 10 and 12-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10092003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Drawings

Figures 17-19 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

On page 5, lines 5, 9, 13, 15, 19 and 22, after each occurrence of "roll" insert ---
102 ---.

On page 6, lines 4, 9, 11, 15 and 21, change "belt" to --- intermediate transfer
belt 100 ---.

On page 6, lines 6, 11, 15, 17 and 22, after "backup roll" insert --- 106 ---.

Art Unit: 2852

On page 6, lines 6, 11, 15 and 17, after "tension roll" insert --- 105 ---.

On page 6, lines 7, 12 and 16, after "roll" insert --- 104 ---.

On page 6, lines 14 and 18, after "driving roll" insert --- 102 ---.

On page 6, lines 18 and 23, after "surfacing roll" insert --- 104 ---.

On page 6, line 23, change "roll and" to --- roll 105 and ---.

On page 7, lines 1, 6, 14 and 16, change "belt" to --- intermediate transfer belt
100 ---.

On page 7, lines 4, 8 and 11, after each occurrence of "roll" insert --- 102 ---.

On page 11, line 21, change "device" to --- element ---.

On page 12, line 13, change "Raster" to --- raster ---.

On page 12, line 17, change "LB" to --- LB (LB-Y, LB-M, LB-C and LB-K) ---.

On page 14, lines 13-14, change "21Y, 21M, 21C and 21K" to --- 21 (21Y, 21M,
21C and 21K) ---.

On page 15, line 4, change "device" to --- devices ---.

On page 15, line 12, change "26Y, 26M, 26C and 26K" to --- 26 (26Y, 26M, 26C
and 26K) ---.

On page 16, line 23, change "driven" to --- driving ---.

On page 17, line 3, change "driven" to --- driving ---.

On page 17, line 5, change "53" to --- 51 ---.

On page 17, line 6, change "51" to --- 50 ---.

On page 17, line 15, change "Fusing" to --- fusing ---.

On page 17, line 23, change each occurrence of "a exiting" to --- an exiting ---.

Art Unit: 2852

On page 18, line 10, change "a resist" to --- the resist ---.

On page 18, lines 14, 15 and 23, change "discharging" to --- exiting ---.

On page 18, line 20, reference numerals "45" and "46" are identified, however, neither reference numeral appears to be shown in any of the figures.

On page 18, line 25, change "Figs. 2 and 3" to --- Fig. 2 ---.

On page 19, line 4, change "the image forming unit" to --- image forming units ---.

On page 19, line 22, change "drum" to --- drums ---.

On page 19, line 25, change "in" to --- by ---.

On page 20, line 16, change "Figs. 2 and 3" to --- Fig. 2 ---.

On page 20, line 20, change "42" to --- 43b ---.

On page 22, line 3, change "belt" to --- intermediate transfer belt 25 ---.

On page 23, line 1, change "driven" to --- driving ---.

On page 25, line 5, before "belt" insert --- intermediate transfer ---.

On page 25, line 13, change "belt" to --- intermediate transfer belt 25 ---.

On page 26, line 23, after "roll" insert --- 27 ---.

On page 27, line 5, after "belt" insert --- 25 ---.

On page 27, line 13, after "roll" insert --- 28a ---.

On page 27, line 18, change "roll and the belt" to --- roll 28a and the intermediate transfer belt 25 ---.

On page 27, line 23, change "belt" to --- intermediate transfer belt 25 ---.

On page 28, lines 5 and 8, change "belt" to --- intermediate transfer belt ---.

On page 28, line 6, after "roll" insert --- 27 ---.

On page 30, lines 4 and 5, delete --- on the ---.

On page 31, line 17, change "driven" to --- driving ---.

On page 32, lines 1 and 5, after each occurrence of "drums" insert --- 25 ---.

On page 32, lines 2 and 22, after "belt" insert --- 25 ---.

On page 32, line 3, after "member" insert --- 25 ---.

On page 32, line 8, delete --- on the ---.

On page 32, line 9, after "belt" insert --- 65 ---.

On page 33, line 7, change "a damper" to --- the damper ---.

On page 33, lines 7 and 25, after "drum" insert --- 15 ---.

On page 34, lines 1 and 4, after "member" insert --- 16 ---.

On page 34, lines 2, 3 and 5, after "drum" insert --- 15 ---.

On page 34, line 10, after "photoreceptor" insert --- drum ---.

On page 34, line 22, delete ---of ---.

On page 34, line 24, change "robber" to --- rubber ---.

On page 42, change "DISCROS URE" to --- DISCLOSURE ---.

Appropriate correction is required.

Claim Objections

Claims 12 and 14-18 are objected to because of the following informalities:

Claim 12, line 3, delete --- on a ---.

Claim 12, line 4, delete --- on an ---.

Claim 14, line 2, change "in contact with" to --- to contact ---.

Claim 14, line 3, change "the substantially" to --- substantially the ---.

Claim 14, line 4, after "as" insert --- a ---.

Claim 15, line 2 change "in contact with" to --- to contact ---.

Claim 15, line 3, change "the substantially" to --- substantially the ---.

Claim 16, line 4, change "in contact with" to --- to contact ---.

Claim 16, line 5, change "the substantially" to --- substantially the ---.

Claim 17, line 2, change each occurrence of "a" to --- an ---.

Claim 18, line 2, change "a" to --- an ---.

Claim 18, line 7, change "the substantially" to --- substantially the ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-8, 11, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yu. Referring to Figure 2, Yu discloses a driving device 50 for an image forming apparatus for driving a photoreceptor belt 10 (i.e., image carrying member; endless member) for rotationally driving the photoreceptor belt by transmitting a rotational driving force of a motor 60 (i.e., driving power source) to the photoreceptor

Art Unit: 2852

belt comprising: a second roller 48 (i.e., rotating member; second driving unit) for rotating in contact with at least one of a first roller 47 (i.e., driving force transmitting member; first driving unit) and the photoreceptor belt, which are arranged in a driving force transmission path for transmitting the driving force to the photoreceptor belt, the second roller rotating in contact with the first roller or the photoreceptor belt, and providing, upon occurring fluctuation in velocity of the first roller or photoreceptor belt, a viscous effect that suppresses the fluctuation in velocity.

Allowable Subject Matter

Claims 4, 5, 9, 10 and 12-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 17 is allowable over the prior art of record because the prior art of record fails to teach or suggest providing an image forming apparatus with an endless member supporting system comprising an endless member for carrying an image or a medium having an image formed thereon; and a vibration model comprising a driving system comprising a driving unit for rotating an endless member; the endless member supporting system having a resonance point in the range outside of from 10 to 100 Hz.

Art Unit: 2852

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kryk discloses a method and apparatus for driving a printing apparatus.

Miwa et al disclose a damping device for rotating members.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William J. Royer
Primary Examiner
Art Unit 2852

wjr
April 29, 2005